Brief Reports

Use of a Drawing Task in the Treatment of Nightmares in Combat-Related Post-Traumatic Stress Disorder

Charles A. Morgan III, MD and David Read Johnson, PhD, RDT,
West Haven, CT

Abstract

Treatment of nightmares in two Vietnam veterans with post-traumatic stress disorder (PTSD) was conducted comparing a drawing task with a writing task. Our hypothesis is that the isomorphism between visual imagery and the visual modality of nightmares may provide a more effective means of transforming and integrating the traumatic material into normal cognitive schemas. In a 12-week intervention in which drawing and writing were alternated, both subjects reported reduction in frequency and intensity of their nightmares in the drawing condition. This study provides support for more extensive study of art therapy methods in post-traumatic stress disorder.

Introduction

Art therapy has been used successfully in the assessment and treatment of post-traumatic stress disorder. Art therapy techniques have increasingly been used to help mental health professionals diagnose and assess the degree of severity of trauma, from child abuse to acute stress (Blain, Bergner, Lewis, & Goldstein, 1981, Manning, 1987; Schornstein & Derr, 1978; Sidun & Rosenthal, 1987; Spring, 1993; Wohl & Kaufman, 1985; Yates & Beutler, 1985). Recently, reports of art therapy in the ongoing treatment of trauma victims have suggested that the acceptance of and working through of the shifts in self-representations resulting from trauma are greatly facilitated by the art process (Johnson, 1987; Kelly, 1984; Malchiodi, 1990; Naitove, 1982; Peake, 1987; Simonds, 1994; Stember, 1977, 1978). The transformation of mental images of traumatic events into visual expression via drawing allows trauma victims to communicate their inner pain nonverbally and less directly than through words. The play of form, color, and style allows metaphoric and partial expressions of trauma, in contrast to the direct representation of the event often called for by linguistic communication. The "canvas" provides a transitional space in which memory and current reality can mix within the perceived control of the subject, so that the ability to integrate previous self-images with the traumatic event is enhanced.

The reported effects of art therapy include improvements in self-esteem, integration, and stress reduction. None of the published reports indicates that art therapy can be a focused treatment for a specific symptom of post-traumatic stress disorder, such as reexperiencing, avoidance, or hyperarousal. Only Golub (1985) has reported on art therapy with Vietnam combat veterans. In that article she mentions one veteran whose recurrent nightmares ceased after rendering them in painting. Similarly, there have been few studies of nightmares among combat veterans with post-traumatic stress disorder (van der Kolk et al., 1984).

This pilot project examines the question whether art therapy, specifically a drawing task, can be targeted to impact on a specific and pervasive symptom of PTSD: nightmares. Due to the visual nature of the symptom of nightmares, it is hypothesized that the victim has recorded the traumatic event in visual form, which during sleep is released into consciousness, waking the subject. If, at the moment of waking, the patient immediately draws the nightmare, the possibility exists that the contents of the event are most available to consciousness and, therefore, can be integrated into the person's overall cognitive schemas.

We became intrigued by informal reports form patients of this effect after initiating an art therapy module in our inpatient PTSD program (Johnson, Feldman, Southwick, & Charney, 1994). Veterans in our program participate in weekly art therapy groups over a 16-week period. Individual art projects as well as a community art show are also important elements in their treatment.

In order to test the effect of drawing on nightmares, we conducted a structured intervention using two conditions on two subjects who were suffering from combat-related nightmares. The first condition consisted of drawing the nightmare immediately after waking. The second condition consisted of writing a nightmare immediately after waking. Both conditions involve the concretizing of the experience. The art task allowed the actual stimulus to be represented in nonverbal form, closer to the manner in which it was originally recorded. We were interested in whether differences in the modality of expression would result in measurable differences in outcome.

Subjects

Both subjects volunteered to participate and were Vietnam combat veterans (ages 42 and 44) who met DSM-III-R criteria for Post-Traumatic Stress Disorder (PTSD), by means of the Structured Clinical Interview for Diagnosis (Spitzer & Williams, 1985). Each was an inpatient in a 16-week PTSD program and reported the presence of combat nightmares that occurred four or more times in a one-month period prior to the trial. These nightmares were of real combat experiences. Both subjects were high school graduates with average intelligence and no prior experience with art therapy or art beyond elementary school. Neither had any learning disability or problem with written or verbal expression.

Description of the Nightmares

Subject #1—"I am flying the chopper down to the LZ (landing zone). It is a hot area, under fire. I have to go down to rescue my men. As I touch down on the zone, more enemy fire breaks out. A woman sniper pops up from a rat tunnel just in front of the cockpit and fires. She kills my co-pilot, then turns on me and fires. It just misses me and I take off. I can see her face clear as day, then I wake up sweating and my heart pounding."

Subject #2—"We are out on patrol and come into this village. We are pretty sure something's up because there are no kids around. All of a sudden one of the guys in my platoon gets hit. Goes down. We open fire. Then they come out. Everybody goes crazy and sets everything on fire, the old men, women, everybody....I wake up screaming and my bed is torn up. I am covered with sweat."

Method

Subjects were told that they were to participate in an experiment that was to test the effects of both drawing and writing on an individual's ability to go back to sleep after having been awakened by a distressing nightmare. Each was informed that the test involved four 3-week intervals devoted to drawing or writing in an alternating ABAB or BABA format. Every effort was made by the authors to show no bias toward either condition.

During the writing intervals, subjects were instructed, in the event of a nightmare, to write the nightmare "in as much detail as possible," as soon as possible upon awakening. They were provided pens and a notebook for this purpose. Other than the restriction of not drawing the nightmare, subjects were free to stay up or return to bed.

During the drawing intervals both subjects were given a drawing tablet, a set of oil pastels, and a pencil to be kept at the bedside at all times. Subjects were instructed to draw the nightmare "in as much detail as possible" using the oil pastels. A subject could decide to draw the nightmare in its entirety or to draw the traumatic scene that had awakened him. As in the writing intervals, after having completed the drawings, subjects were free to do as they pleased with the exception of writing the nightmare.

Each week throughout the 12 weeks, subjects rated four variables. Frequency of the recurrent nightmare, Intensity of nightmare, and Startle upon awakening from the nightmare were rated on 5-point Likert scales (0 – 4). Difficulty going back to sleep after a nightmare (more than 1 hour) was indicated by a yes/no response. An overall measure of Nightmare Severity was created by multiplying frequency by intensity of nightmares.

Results

Quantitative findings: Table 1 lists the raw data for each subject for each week. Both subjects experienced fewer and less intense nightmares in the drawing condition compared to the writing condition. Difficulty returning to sleep and startle upon awakening were also improved, compared to the writing condition. A two factor ANOVA showed no significant differences between the two subjects, but significant differences in the measure of nightmare frequency, intensity, and severity; sleep difficulty; and startle (see Table 2). In addition, changes within each 3-week period indicate a cumulative effect (positive or negative) of each intervention (see Figures 1 and 2).

Qualitative impressions: Both patients reported a sense of frustration and difficulty during the intervals of writing the

Table 1
Raw Scores on Study Measures for Both Subjects

Subject 1

Week	*Mode*	*Freq.*	*Inten.*	*Overall Severity*	*Sleep Problem*	*Startle*
1	drawing	4	3	12	1	3
2	drawing	2	2	4	0	2
3	drawing	1	1	1	0	0
4	writing	1	2	2	1	3
5	writing	3	3	9	1	3
6	writing	3	3	9	1	3
7	drawing	1	2	2	0	1
8	drawing	1	1	1	0	0
9	drawing	0	0	0	0	0
10	writing	2	2	4	1	3
11	writing	3	3	9	1	3
12	writing	-------- patient quit writing ----------				

Subject 2

1	writing	3	3	9	1	3
2	writing	3	2	6	0	3
3	writing	3	4	12	1	4
4	drawing	2	2	4	1	3
5	drawing	1	1	1	0	1
6	drawing	1	1	1	0	0
7	writing	2	2	4	1	3
8	writing	3	3	9	1	4
9	writing	-------- patient quit writing ----------				
10	drawing	1	2	2	0	1
11	drawing	1	2	2	0	1
12	drawing	1	1	1	0	0

Table 2
Two Factor ANOVA (Subject x Modality)
of Study Measures

F(1.1.18)

	df	Nightmare Frequency	Nightmare Intensity	Nightmare Severity	Sleep Problem	Startle
Subjects	1	.01	.09	.01	.40	.26
Modality	1	10.99°°	12.85°°	11.53°°	21.40°°°	31.26°°°
Subjects x Modality	1	.92	.09	1.09	.40	.26

°° $p < .01$
°°° $p < .001$

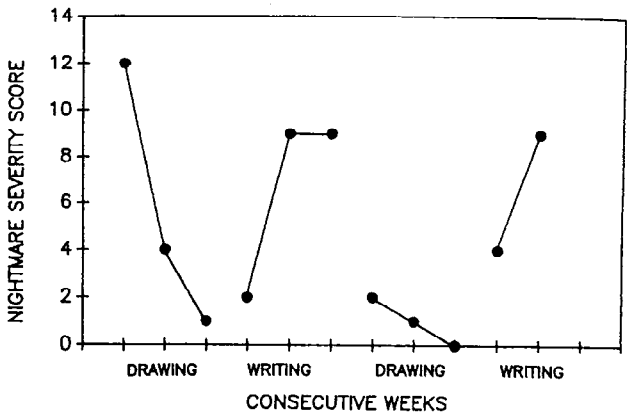

Figure 1 Effects of Drawing and Writing on Nightmare Severity—Subject #1

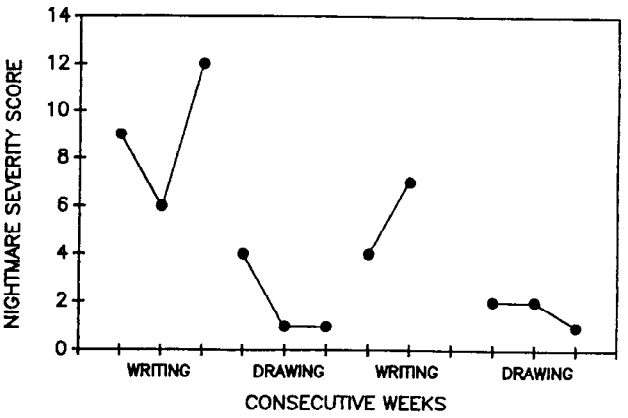

Figure 2 Effects of Drawing and Writing on Nightmare Severity—Subject #2

nightmares. In fact, both gave up the writing task in their last week. "I couldn't write fast enough," "It was more annoying to write." "I pushed too hard, the pencil broke...the words just didn't do it right." "I just got more upset inside." Subject #1 reported that during the drawing intervals, "I'm not sweaty and jumpy when I wake up. The nightmare wakes me up, but I'm calmer. More relaxed. I can go back to bed and go to sleep." Subject #2 similarly noted, "It's weird. I don't jump out of the bed anymore." "Writing? Well, I don't seem to be any good at writing. I get too tight inside. I tried it but it doesn't come out, I just get mad. I did it for 10 days but after that—no way! I don't see any difference. I don't know. I still sweat and pace around a lot."

Unexpected findings were the development and increase in aerial perspective in the nightmare and an increased sense of self-awareness while dreaming. "It's not like it happened. I'm seeing it for the first time from the air. I can see it all happening to me just like the situation always was, but I'm up in the air." "It's weird, I know that I'm dreaming while it's happening to me. I never did that before. I say to myself this is a nightmare about Vietnam."

Both subjects also experienced a change in their nightmare's chronological pattern. "The nightmare starts sooner than it used to. Instead of being at the ambush, I start way back at the base-camp. I wake up way before I get to the ambush."

Discussion

This pilot project attempts to explore the specificity of art therapy in the treatment of nightmares in post-traumatic stress disorder. The evidence illustrated by these two subjects is intriguing and raises the question as to the mechanisms involved in the therapeutic effect. Victims of trauma often show difficulties in processing emotional states, usually referred to as alexithymia (Krystal, 1979). Representing emotional states through language may be impaired, thus preventing writing from being an effective means of processing the traumatic material in the nightmare. Consistent with paradigms of cognitive development, however, traumatized individuals may be able to symbolize thoughts and emotions in other ways—specifically through imagistic, iconic, or symbolic modes rather than a lexical one (Werner & Kaplan, 1963). Therefore, we suggest that art therapy provides an isomorphic arena for the expression of the traumatic material.

Nightmares, traumatic or otherwise, are not a new or unknown clinical phenomena. As long as children have had nightmares, mothers have been confronted and challenged with these distressing experiences (Hartmann, 1984). Healthy mothering provides several important things to the distressed child who has suffered a nightmare: a sense of reality testing (that it is only a dream); a sense of mastery (mother can help check under the bed, shut/lock the window, closet, etc.); an opportunity to share (or not be alone with the trauma), and solacing. Art therapy may provide these elements as well. A sense of reality testing is supported by the task of drawing the nightmare, which distances the person from the immediate experience. The mastery element is inherent in the production of the affectively charged drawing—which can be, in concrete fashion, "put away," decreasing the person's sense of helplessness. An opportunity to share the trauma, which is often "beyond words," is present when the subject shows the drawing to the therapist. Solacing (an empathic stance and a containment of the anxiety linked to the imagery) is provided when the therapist is present.

This study suggest that drawing may offer a significant, non-invasive alternative to existing forms of treatment for night-

mares. Many questions remain unanswered. First, this study needs to be conducted on a larger sample of patients and among different types of patients with PTSD. Second, the significance of the development of an aerial perspective should be explored. Does this reflect, in a concrete way, the attempt to gain perspective on one's experience, being the visual counterpart of subjective awareness in the nightmare? Finally, other modes of expression (e.g., painting, sculpture, voice, movement) might be studied.

Editor's Note: Dr. Morgan and Dr. Johnson may be contacted at the National Center for PTSD, VA Medical Center, West Haven, CT 06516.

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